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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,308	07/26/2001	Mitsuhiro Shimazu	VX012328	4960

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EXAMINER

HAVAN, THU THAO

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,308

Applicant(s)

SHIMAZU ET AL.

Examiner

Thu-Thao Havan

Art Unit

2672



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings filed on July 26, 2001 are approved.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim **1-5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Koyanagi et al. (US patent no. 6,125,145) in view of Fujishima et al. (US patent 5,887,365).

Re claim **1**, Koyanagi teaches a display device comprising a display screen having a background portion and a display portion, background portion having display colors and display portion having display colors arranged in patterns for providing information (col. 3, line 32 to col. 4, line 11), and change means for improving readability of display screen by changing a difference in at least one brightness, saturation and hue between the respective display colors of background portion and display portion (col.5, line 10 to col. 6, line 65; figs. 1a-1b). In other words, Koyanagi teaches image input device with a current image and a reference image storing a display screen. The current image corresponds to display portion and the reference image corresponds to the background portion of the claimed limitation. Both the current

image and the reference image have color conversion steps depending on it's brightness, hue, and saturation. Koyanagi teaches the display screen is modified or changed based on the color conversion according to the brightness, saturation, and hue of the current and reference image.

Koyanagi fails to specifically disclose a construction machine. However, Fujishima teaches a construction machine having a liquid crystal display screen as a lighting display (col. 22, lines 33-67). Fujishima teaches a box-type control panel constituting the setting device. The control panel has various switches with various LED associated with the switches. The LED is lit up to inform the operator of that area limiting excavation control mode is now selected. It would have been obvious for one of ordinary skill in the art to combine a construction machine of Fujishima to the system of Koyanagi because it would have enable an input display sensing lighting variations on a display screen of Koyanagi to display a control panel for construction machine.

(Fujishima: col. 22, line 33 to col. 24, line 28; figs. 15-16).

Re claim 2, Koyanagi teaches change means changes the brightness, saturation or hue of such one of the display colors of background portion or display portion which occupies the larger area on display screen (col. 7, line 5 to col. 8, line 61; col.5, line 10 to col. 6, line 65; figs. 1a-1b). In other words, Koyanagi teaches both the current image and the reference image have color conversion steps depending on it's brightness, hue, and saturation. Koyanagi teaches the display screen is modified or changed based on the color conversion according to the brightness, saturation, and hue of the current and reference image.

Re claim 3, Koyanagi teaches change means changes the brightness, saturation or hue of the display color of background portion (figs. 1a-1b). In figure 1b, Koyanagi discloses changes the brightness, saturation or hue of the display color of background portion.

Re claim 4, Koyanagi teaches an illumination switch for turning ON/OFF an illumination, wherein in response to the ON/OFF of illumination switch, the brightness, saturation or hue of either the display colors of background portion or display portion, or the display color of background portion and display portion is changed (col. 7, line 5 to col. 9, line 35; figs. 1a-1b).

Re claim 5, Koyanagi teaches a display device comprising a display screen having a background portion and a display portion, background portion having display colors and display portion having display colors arranged in patterns for providing information (col. 3, line 32 to col. 4, line 11), and illuminance detecting for detecting illuminance (col. 7, lines 5-47), and change means for changing a difference in at least one of brightness, saturation and hue between the respective display colors of background portion and display portion (col.5, line 10 to col. 6, line 65; figs. 1a-1b), when illuminance detected by illuminance detecting means is higher or lower than a predetermined threshold value (col. 7, line 5 to col. 9, line 35). In other words, Koyanagi teaches image input device with a current image and a reference image storing a display screen. The current image corresponds to display portion and the reference image corresponds to the background portion of the claimed limitation. Both the current image and the reference image have color conversion steps depending on it's

brightness, hue, and saturation. Koyanagi teaches the display screen is modified or changed based on the color conversion according to the brightness, saturation, and hue of the current and reference image. As for the illuminance detecting means, Koyanagi teaches images light form an object to be imaged and outputs an image signal in the form of an electric signal based on the lens block. In particular, lights from the current and reference image are focused by the lens to form images. Consequently, an image signal corresponding to a received light amount then is outputted.

Koyanagi fails to specifically disclose a construction machine. However, Fujishima teaches a construction machine having a liquid crystal display screen as a lighting display (col. 22, lines 33-67). Fujishima teaches a box-type control panel constituting the setting device. The control panel has various switches with various LED associated with the switches. The LED is lit up to inform the operator of that area limiting excavation control mode is now selected. It would have been obvious for one of ordinary skill in the art to combine a construction machine of Fujishima to the system of Koyanagi because it would have enable an input display sensing lighting variations on a display screen of Koyanagi to display a control panel for construction machine. (Fujishima: col. 22, line 33 to col. 24, line 28; figs. 15-16).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tomitaka, US patent no. 5,430,809

Fujishima et al., US patent no. 6,169,948

Washburn, US Patent No. 5,399,947

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu-Thao Havan whose telephone number is (703) 308-7062. The examiner can normally be reached on Monday to Thursday from 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (703) 305-4713.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231


or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Thu-Thao Havan
Art Unit: 2672
July 11, 2003



MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600